L 00017-66

ACCESSION NR: AP5021375

ENCLOSURE: 01

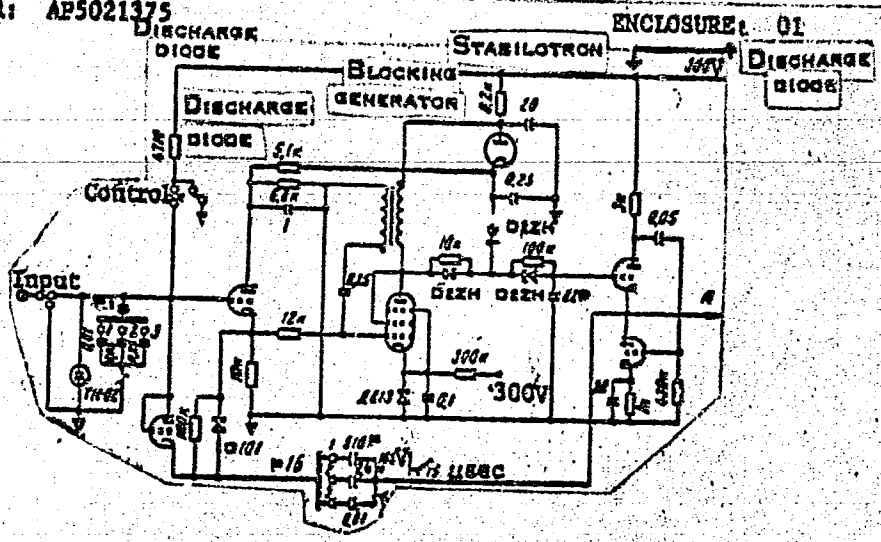


Fig. 1. Integrator circuit diagram.

Card 2/3

SOV/127-59-1-13/26

AUTHORS: Nikolayev, S. I., Kondrat'yev, L. I., and Il'in, A. M., Mining Engineers and Skakun, G. P., Mining Technician

TITLE: High-Power Mass Blasting in Vysokogorskiy Mine (Massovyy vzryv bol'shoy moshchnosti na Vysokogorskom rudnike)

PERIODICAL: Gornyy zhurnal 1959, Nr 1, pp 46-50 (USSR)

ABSTRACT: This is description of high power mass blasting operations in the Vysokogorskiy Mine, located on the eastern slope of the Middle Ural. The yearly production of this mine is 3,000,000 tons of 40% iron ore. A forced level caving system is applied in the mine. The mass blasting operation was carried out in the south butt-end of block # 15 at levels of 90 - 150 m; 179 tons of ammonite were used. There are 3 diagrams, 2 tables and 1 Soviet reference.

ASSOCIATION: Gornoye upravleniye Nizhne-Tagil'skogo metallurgicheskogo Kombinata. (The Mining Management of the Nizhniy-Tagil' Metallurgical Combine).

Card 1/1

ANDREYEV, Ye.T., kand.tekhn.nauk; KONDRAT'YEV, L.I., inzh.;
VAKHROMOV, P.S., inzh.; BORODIN, N.K., inzh.

Erecting a crushing and skip hoisting complex at the "Magnetitovaia-bis" mine. Shakht.stroi. 9 no.11:15-18 N '65. (MIRA 19:1)

1. Trest Sverdlovskshakhtorudstroy.

KANDEL', Ye.A., inzh.; KONDRAT'YEV, L.I., inzh.; BORODIN, N.K., inzh.

Effective use of EDKZ electric detonators. Shakht.stroi. no.11:27-28 N '59. (MIRA 13:3)
(Mining engineering--Equipment and supplies)

ANDREYEV, Ye.T.; KONDRAT'YEV, L.I.; VAKHROMOV, P.S.; MEDVEDEV, V.V.; SAKANTSEV, Yu.S.

Rapid concreting of underground crushing machine foundations. Shakht. stroi. 6 no.3:20-23 Mr '62. (MIRA 15:3)

1. Sverdlovskiy gornyy institut (for Andreyev). 2. Trest Sverdlovskshakhtorudstroy (for Kondrat'yev, Vakhromov, Medvedev, Sakantsev).
(Crushing machinery--Foundations) (Concrete construction)

ANDREYEV Ye.T., inzh.; KONDRAT'YEV, L.I., inzh.; BORODIN, N.K., inzh.

Selecting the type of shaft formwork for lining vertical mine shafts. Shakht. stroi. 9 no.2:20-21 F '65. (MIRA 18:4)

1. Sverdlovskiy gornyy institut (for Andreyev). 2. Trest Sverdlovskshakttorudstroy (for Kondrat'yev, Borodin).

ANDREYEV, Y-.T., kand.tekhn.nauk; KONDRAT'YEV, I.I., inzh.; BORODIN, N.K., inzh.; GAYEV, A.Ye., inzh.

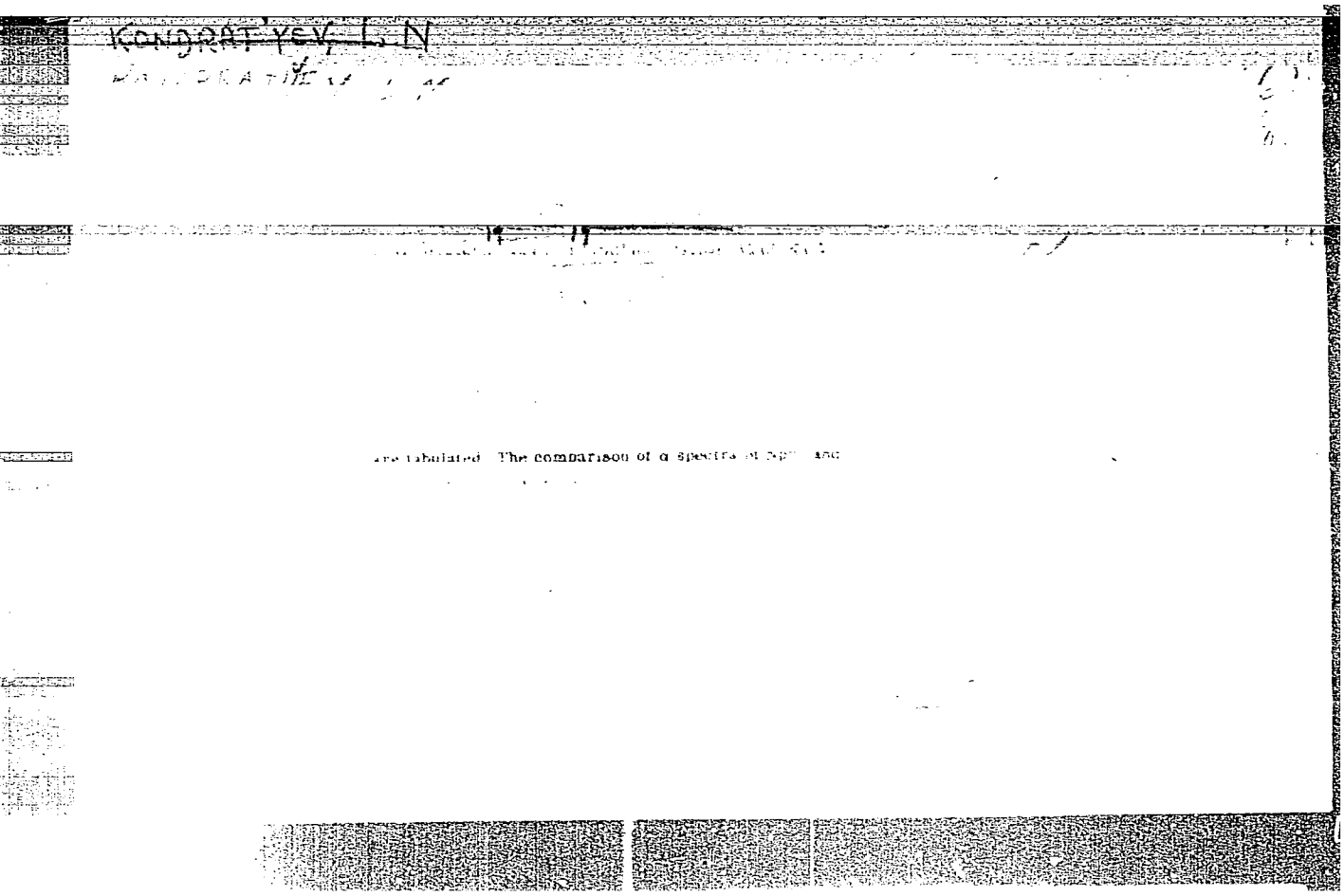
Underground installation of a flue. Prom.stroi. 42 no.7:24-26 '65. (MIRA 18:8)

KONDRAT'YEV, L.L.

KONDRAT'YEV, L.L.; ZHUKOVA, V.I., inzh., red.; FREGER, D.P., tekhn.red.

[Efficient suspension devices used in electroplating] Ratsional'nye konstruktsii podvesok dlia gal'vanopokrytiia detalei. Leningrad, 1956. 1 p. (Leningradskii dom nauchno-tekhnicheskoi propagandy. Informatsionno-tekhnicheskii listok, no.34. Zashchitnye pokrytiia metallov) (MIRA 10:12)

(Electroplating)



KONDRAT'EV, L.N.

SUBJECT USSR / PHYSICS CARD 1 / 2 PA - 1771
AUTHOR KONDRAT'EV,L.N., NOVIKOVA,G.I., SOBOLEV,JU.P., GOL'DIN,L.L.
TITLE The α-Decay of Pu^{240}.
PERIODICAL Žurn.eksp.i teor.fis,31,fasc.5,771-774 (1956)
Issued: 1 / 1957

The authors investigated the αspectrum of two plutonium sources within the energy range of from 4.800-5.050 MeV by means of the α-spectrometer of the Academy of Science in the USSR. The results obtained by the experiments which took 2 weeks each, are illustrated in form of a diagram. A line A_1, which is known from literature, and which is due to the α-decay of Pu^{240} on to the level 4+ of the daughter nucleus, is clearly marked. The authors were able to give precise definitions of the parameters obtained for this level. Besides this line A_1, also the lines A_2,A_3,A_4 and A_5 are visible in the spectrum of the source A (12% Pu^{239}, 88% Pu^{240}, $< 0{,}2\%$ Pu^{241}, $< 0{,}2\%$ Pu^{242}). In the spectrum of the source B (80% Pu^{239}, 17% Pu^{240}, 3% Pu^{241}, 0,5% Pu^{242}), apart from the line A_1 also the lines B_4 and B_5 are visible.The last two lines are apparently due to the admixture of Pu^{241} and Pu^{242} in the source B, but the line B_5 originates from the superposition of the first satellites. A table contains the energies and relative intensities of the α-particles of Pu^{241} and Pu^{242}. The line A_5 apparently belongs neither to Pu^{241} nor to Pu^{242}.

There remains the assumption that the line A_5 belongs to Pu^{240}. This is all the more natural as the excitation energy of the corresponding level (it is 313 keV) corresponds exactly to the energy of the level 6+. The excitation energy of the level 4+, which was determined from the spectrum, amounts to 147 keV. The energies of the levels 2+,4+,6+ are in the ratio of 1:3,33:7,0, and this is in excellent agreement with experimental data.
At present it is still difficult to say anything about the weak lines A_2 and A_3, they cannot belong to the isotopes Pu^{239}, Pu^{241} and Pu^{242}. Apparently also these lines are connected with the α-decay of Pu^{240}. They apparently belong to the odd rotation structure, and for their moment of their quantity of motion and for their symmetry the pairs of values 1 - and 3 - are valid. The experimental results obtained by this work are shown in form of a table. The scheme of the α-decay of Pu^{240} and of the levels of the daughter nucleus U^{236} were shown in a table. For the intensities of transitions to the levels 2+, 4+ and 6+ the theoretical ratio :

$1 : 0{,}32 : 1{,}2.10^{-3} : 5.10^{-8}$ is here found. The observed intensity of transition to the level 6+ thus is found to be 800 times higher than the computed intensity.

INSTITUTION:

Distr: 4E3d

3393 19 19

ALPHA DECAY OF $Pu^{[illegible]}$ [illegible] Kondrat'ev, [illegible] Novikov, [illegible] P. Sobolev, and L. L. Gol'din. Soviet Phys. JETP 4 [illegible] 1957, June.

In this work results are given of investigations of the spectrum of $Pu^{[illegible]}$ carried out [illegible] [illegible] corresponding to the transition [illegible] [illegible]

KONDRAT'YEV, L. N.

48-7-1/21

AUTHORS: Kondrat'yev, L.N., Novikova, G.I., Dedov, V.B., Gol'din, L.L.

TITLE: α -Decay of Pu^{238} (α -Raspad Pu^{238})

PERIODICAL: Izvestiya Akad. Nauk SSSR, Ser. Fiz., 1957, Vol. 21, Nr 7, pp. 907 - 908 (USSR)

ABSTRACT: The knowledge of the α -decay intensities on the successive levels which belong to a rotation level permits to draw important conclusions on the formation of the daughter nuclei. The most accurate values of the α -decay intensities can be determined by direct measurement of the α -transitions by means of an α -spectrometer or by an ionization chamber. The determination of the intensities by other methods sometimes leads to great errors. The low intensity of the transitions to the levels $4^+, 6^+$ and so on make it necessary to chose comparatively short-lived substances for the investigation by means of an α -spectrometer. In this work the highest excited states of rotation of U^{234} which show themselves in the α-decay of Pu^{238} were investigated, where the investigation was carried out by means of a magnetic α -spectrometer of the Academy of Science of the USSR. Pu^{238} was obtained as a product of the α-decay of Cm^{242} which had

Card 1/2

formed upon irradiation of Am^{241} in the flow of slow neutrons. The separation of the elements was performed by the chromatographic method, where a complete separation of plutonium and americium was obtained. Two series of measurements lasting 40 and 110 hours respectively were carried out. The obtained α -spectra are shown in figure 1, where the weak α -line no doubt belongs to Pu^{238}. The data of all measurements are given in the table. The determined levels fit well into the scheme of rotation which is further explained. The scheme of the levels of U^{234} is represented in figure 2. There are 2 figures, 1 table and 4 references, 3 of which are Slavic.

AVAILABLE: Library of Congress

Card 2/2

KONDRAT'YEV L.N.

AUTHOR NOVIKOVA, G.I., KONDRAT'YEV, L.N., SOBOLEV, Yu.P., GOL'DIN, L.L. 56-5-11/55
TITLE The Alpha-Decay of Pu^{239}. (Alfa-raspad Pu^{239}.- Russian)
PERIODICAL Zhurnal Eksperim. i Teoret. Fiziki 1957, Vol 32, Nr 5, pp 1018-1021 (USSR)

ABSTRACT First all the paper under review makes reference to some relevant previously published papers and thus outlines the present stage in the investigations with respect to the above problem. The authors investigated the α-spectrum of Pu^{239} by means of a magnetic α-spectrometer in the energy interval from 4,850 to 5,120 MeV. The first diagram in the paper under review represents the α-spectrum in the energy interval 5,025 - 5,120 MeV. One can see quite distinctly a line that corresponds to the level of 84 keV. A second diagram shows the part of the spectrum situated in the energy interval 4,850-5,080 MeV. With certainty one can see here an α-line corresponding to the level with the excitation energy of 151 keV. The intensity of this transition amounts to (0.013 0.005) %. The excitation energy of the level with I = 9/2 belonging to the rotational band with K = 1/2 amounts to 153 keV and thus coincides with the energy of the level discovered by the authors of the paper under review. Thus the energies of

CARD 1/3

The Alpha-Decay of Pu^{239}.

three levels following each other are in good agreement with the two-parameter formula proposed by A. Bohr (Rotational States of Atomic Nuclei, Copenhagen, 1954). Therefore the lowest level actually has the spin 1/2, and it is the first level of the developed system of the rotational levels with K = 1/2. It is possible to compute the main characteristics of the nucleus from the distances between the levels:

$$\hbar^2/2J = 6.1 \text{ keV}, \quad a = -0.276.$$

The intensities of the transitions to the levels with I = 3/2 and I = 5/2 differ only little from each other, but they are five to seven times smaller than the intensity of the transition to a level with I = 1/2. The intensities of the transitions to the levels with I = 7/2 and I = 9/2 differ only slightly from each other, but they are several hundred times smaller than the intensities of the transition to the two previous levels. From the structure of the doublet the following conclusions can be drawn: The α-particles corresponding to the transition between the basic state of Pu^{239} and the level $1/2U^{235}$ carry away with them the angular momentum 1 = 0. For this reason, the basic state

CARD 2/3

GOLDIN, L. L., KONDRAT'YEV, L. N., NOVIKOVA, G. I., PILIYA, A. D.,
TER MARTIROSYAN, K. A. (Moscow USSR)

"La Disintegration alpha des noyaux non Spheriques."

report presented at the Intl. Congress for Nuclear Interactions (Low Energy) and Nuclear Structure (Intl. Union and Pure and Applied Physics), Paris, 7-12 July 1958.

KONDRAT'YEV, L.N.

AUTHORS: Kondrat'yev, L. N., Dedov, V. B., Gol'din, L. L. 48-22-2-1/17

TITLE: The α-Decay of Cm^{242} (α-raspad Cm^{242})

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya, 1958, Vol. 22, Nr 2, pp. 99 - 100 (USSR)

ABSTRACT: The intensity of the α-decay to the second excited level (4^+) was calculated here and the values of calculation were compared with those of the experiments. The formula by L. D. Landau (Ref 1) and the data of Ref 2 were used for the comparison. It is shown that in Cm^{242}- and Cm^{244}-nuclei an especially strong divergence of the values of calculation with those of the experiments occurs. As the intensity of the α-decay of curium had only been measured once (Refs 5, 6) the authors checked the correctness of these measurements. The work was performed by means of the magnetic α-spectrometer of the AS USSR. A number of photographs with an exposure of up to one week each were made. The energy of the main peak was not measured here. It was assumed as being equal to 6110 keV (Ref 5). The energies of all α-lines were measured with reference to this value. The α-line with

Card 1/2

The α-Decay of Cm^{242} 48-22-2-1/17

5777 keV is clearly visible in section III of the α-spectrum and is no doubt connected with a Cm^{243}-admixture. The results of these experiments show that the great divergence between the experimental and the calculated values of the intensity in the case of α-decay to level 4^+ is entirely real. Within the frame of the existing conceptions this must indicate that in the case of Cm^{242} the shape of the nucleus can in no case be satisfactorily expressed by the formula

$$r(\vartheta) = r_0 \left[1 + \alpha_2 P_2(\cos\vartheta)\right]$$

(Ref 3) and that it is not ellipsoidal (Ref 2). The following scientists helped in the work: I. I. Agapkin, V. F. Konyayev, Yu. N. Chernov, V. N. Kuznetsova. There are 2 figures, 1 table, and 6 references, 4 of which are Soviet.

AVAILABLE: Library of Congress

1. Cm^{242} - (α) Decay-Theory 2. Curium isotopes (Radioactive)

Card 2/2

21(7)

AUTHORS: Tret'yakov, Ye. F., Kondrat'yev, L. N., Khlebnikov, G. I., Gol'din, L. L.

SOV/56-36-2-3/63

TITLE: The Spectrum of Internal Conversion Electrons Accompanying α-Decay of Pu^{238} and Pu^{240} (Spektr elektronov vnutrenney konversii, soprovozhdayushchikh α-raspad Pu^{238} i Pu^{240})

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959, Vol 36, Nr 2, pp 362-366 (USSR)

ABSTRACT: The investigation of the decay of even-even nonspherical nuclei and of the energy of excited levels, especially the α-decay of Pu^{238} and Pu^{240}, is of very great theoretical importance. Investigation of the α-decay of these nuclei and of the levels of daughter nuclei occurring in this decay is carried out either by the α-spectrometry method, by that of γ-γ coincidence, or, as in the present paper, by the analysis of the conversion electron spectrum accompanying this decay. Measurements were carried out by means of a β-spectrometer with toroidal magnetic field and α-e-coincidence circuit. The method has already been described (Refs 1, 2). Scintillation counters with stilbene

Card 1/3

crystals were used for β-counting. Electron energy was determined by comparison with the conversion electron energy of the transitions 2+→0+ (43.5 kev) and 4+→2+ (99.8 kev) in U^{234}, the daughter nucleus of Pu^{238}. (These exact data were obtained by Perlman (Perelman)(Ref 3)). For the investigation of the conversion electron spectrum occurring in the α-decay of Pu^{238} which therefore supplies data concerning the level of U^{234}, a source with 1 cm diameter and an intensity of 40 μC was used. The results obtained by the investigation are shown by figure 1 (course of the spectrum with assignation of individual peaks), figure 2 (scheme of U^{234}-levels: 499 kev(8+), 295.9 kev(6+), 143.3 kev(4+), 43.5 kev(2+), containing data from references 3 and 4), and by table 1 (energy of U^{234}-levels and intensity of α-lines of Pu^{238}, containing data from references 3, 4, 5).

For the investigation of the conversion spectrum of Pu^{240}

a source of only 5μC was used, and the spectrum was investigated within the range of 20 -220 kev. Figure 3 again shows the spectrum, figure 4 the level scheme of U^{236} (daughter nucleus of Pu^{240}): 309 kev (6+), 239 kev (3?), 210 kev (1?), 148.9 kev (4+), 45.3 kev (2+). The lines with (?) are from reference 5, but were also observed by Kondrat'yev et al. (Ref 6). Table 2 shows the intensities of the α-lines (Pu^{240}) and the energies of the U^{236}-levels in comparison with the results obtained by other authors (Refs 3, 6, 7). The authors finally thank G. I. Grishuk, V. F. Konyayev and Yu. N. Chernov for helping to carry out experiments. There are 4 figures, 2 tables, and 7 references, 5 of which are Soviet.

SUBMITTED: June 14, 1958

85678

S/056/60/038/006/020/049/XX
B006/B070

24.6200
AUTHORS: Balats, M. Ya., Kondrat'yev, L. N., Landsberg, L. G., Lebedev, P. I., Obukhov, Yu. V., Pontekorvo, B.

TITLE: Non-radiative Transitions in Heavy μ-mesic Atoms

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960, Vol. 38, No. 6, pp. 1715 - 1719

TEXT: This paper is concerned with studies of the spectra of X-ray photons emitted by mesic atoms of uranium and lead. Since so far only two $2P \rightarrow 1S$ transition mechanisms in mesic atoms have been studied (emission of meso-X-ray photons, and Auger effect), this work is a supplement as well as a contribution to the data on the properties of heavy nuclei. The experimental arrangement is described in the introduction and schematically shown in Fig. 1. A π-beam (270 Mev/c) from the synchrocyclotron of OIYaI (Joint Institute of Nuclear Research) was used. The targets had a thickness of 10.7 g/cm² for uranium and of 10.3 g/cm² for lead. A scintillation counter with a photomultiplier

Card 1/5

85678

S/056/60/038/006/020/049/XX
B006/B070

Non-radiative Transitions in Heavy μ-mesic Atoms

of the type ФЭУ-33 (FEU-33) served as the gamma quantum detector. The counter pulses were conveyed to a 64-channel pulse-height analyzer. The background of the accidental coincidences amounted to about 5% of the counting rate. A Na^{24} source (E_γ = 1.38 and 2.76 Mev) was used for calibration and checking the linearity. The results of measurement for the range 3 - 8 Mev are shown in Fig. 3. Curve I gives the upper limit of the background, II the lower limit for the background of Pb, and III the lower limit for the background of U (n - number of counts per analyzer channel). The spectra are normalized for one and the same μ-mesons stopped in the target. The Pb curve has a clear peak at ~5.3 Mev. On account of the smallness of the NaI (TI) crystal, this peak can be due to three photon energies: 1) E_γ; 2) E_γ -0.5; Mev; 3) E_γ -1.02 Mev, where E_γ = 6.02 Mev is the energy of the $2P \rightarrow 1S$ transition photons in mesic lead. In the region of the peak (5 - 5.5 Mev), less counts were obtained from uranium than from lead. The mean energy of the peak corresponding to the transition $2P \rightarrow 1S$ is about 200 kev larger from uranium than from lead. The photon intensity difference at 6 Mev in mesic uranium and mesic lead indicates that a non-radiative

Card 2/5

85678

S/056/60/038/006/020/049/XX
B006/B070

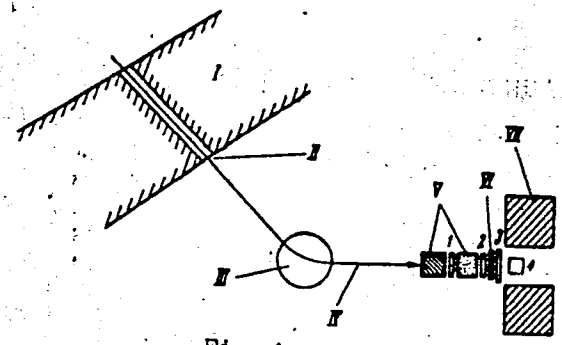


Fig. 1

Legend to Fig. 1: I - concrete shield, II - collimator, III - deflecting magnet, IV - π^- beam, V - filter (75 g/cm^2 Cu + 32g/cm^2 B_4C), VI - target, VII - counter shield (20 cm lead), 1,2 -plastic scintillators, (110 mm diameter, 10 mm thick), 3 - the same (125 mm diameter, 12 mm thick), 4 - NaI(Tl) crystal (30 mm diameter, 10 mm thick).

Card 5/5

84429

S/056/60/039/004/047/048
B006/B056

24.6900

AUTHORS: Balats, M. Ya., Kondrat'yev, L. N., Landsberg, L. G., Lebedev, P. I., Obukhov, B. V., Pontekorvo, B.

TITLE: The Intensity of Radiationless Transitions in μ-Mesic Atoms

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960, Vol. 39, No. 4(10), pp. 1168 - 1170

TEXT: In an earlier paper (Ref. 1) the authors found that the intensity of mesic X-rays 2P - 1S in U^{238} normalized to one stopped muon is considerably less than in Pb. This fact indicates the existence of radiationless transitions in heavy mesic atoms, in which the energy of the 2P - 1S transition is not liberated in the form of an X-ray photon. It is assumed that the probability of radiationless transition (W_{rl}) in mesic lead is negligibly small in comparison to the probability ($W_{h\nu}$) of a transition with emission of one photon ($(W_{h\nu})_{Pb} = 1$) : $1 > (W_{rl})_{U^{238}}/(W_{h})_{U^{238}} > 0.1$.

Now, the authors investigated the 2P - 1S transition intensities in the

of radiation-
2P - 1S transitions

0 ± 0.06
0.15 ± 0.07
0.23 ± 0.04

Card 1/3

0.71 ± 0.05

Card 2/3

84429

The Intensity of Radiationless Transitions in μ-Mesic Atoms

S/056/60/039/004/047/048
B006/B056

There are 2 figures, 1 table, and 1 Soviet reference.

ASSOCIATION: Ob"yedinennyy institut yadernykh issledovaniy (Joint Institute of Nuclear Research). Institut teoreticheskoy i eksperimental'noy fiziki AN SSSR (Institute of Theoretical and Experimental Physics AS USSR)

SUBMITTED: August 13, 1960

Card 3/3

4428
S/048/62/026/012/003/016
B117/B186

24.6800

AUTHORS: Tret'yakov, Ye. F., Kondrat'yev, L. N., Grishuk, G. I., Novikova, G. I., and Gol'din, L. L.

TITLE: A double, air-core β-spectrometer having a toroidal field

PERIODICAL: Akademiya nauk SSSR.. Izvestiya. Seriya fizicheskaya, v. 26, no. 12, 1962, 1470-1474

TEXT: A β-spectrometer for investigating modes of decay using a coincidence method is described. Its principle parts are two toroidal coils, each weighing 400 kg, placed one above the other and divided into 4 sections connected in parallel for cooling purposes. For each coil the distance between source and detector is 800 mm. Each coil consists of 600 insulated turns made of 0.7 mm stamped copper, which are assembled in 60 packages. They are symmetrical with respect to the median plane of the coil, connected in series, reinforced and cooled in the middle by 2 mm sheet brass provided with a water-cooled pipe. The dimensions and the resolution of the apparatus are determined by the distance f between the source (detector) and the median plane of the coil, and by the coefficient k

Card 1/3

from the equation p(oe cm) = 0.2 χni (A), where p is the momentum of electrons to be focused, i the current intensity, and n the number of turns. f = 400, χ = 0.8 were chosen as being optimum values. The coils are contained in an evacuated case carrying counter-turns on the outside to compensate parasitic fields which are set up when current flows through the coil. A vacuum lock in the middle of the case permits installation of sources between the two coils when they are operating independently. Next to the lock there are Wilson seals for the rods connected with exchangeable diaphragms. Adjustable scintillation counters with stilbene crystals, mounted perpendicular to the axis of the apparatus on separate flanges, serve as detectors. The coils are supplied from two current stabilizers controlled by d-c tube amplifiers. The power supply system makes it possible to maintain a stabilized current of 3 - 70 a for continuous operation at 80 v, or 160 v with the two coils connected in series. Each of the earth's magnetic field components is compensated to 1/50 by 3 threefold coils, connected in series, which are fed by a stabilizer made up of transistors. Debugging the apparatus is very simple; it comes down to checking that the components are accurately made and correctly assembled. With a 4-mm source and a 5-mm diaphragm, one section of the coil has a resolution of 0.45%. With an open diaphragm the

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000824210019-4"

A double, air-core β-spectrometer ... S/048/62/026/012/003/016
B117/B186

luminous intensity almost attains the geometrical value of 10% of 4π; with 0.45% resolution, it amounts to 2%. The resolution with an open exit diaphragm and a 4-mm source is 1%. The decrease in luminous intensity observed when the resolution is increased is related to the fact that the electrons are deflected in their trajectory by the stray field of the turns when they pass near the sections. The deflection of the trajectory can be partially compensated by switching in the second coil. This was confirmed in the case of a 4-mm source and a 5-mm diaphragm, with the second coil connected in series: the luminous intensity increased 1.5-fold and the resolution rose to 0.30%. The paper was presented at the 12th Annual Conference on Nuclear Spectroscopy held in Leningrad from January 26 to February 2, 1962. There are 4 figures and 1 table.

ASSOCIATION: Institut teoreticheskoy i eksperimental'noy fiziki AN SSSR (Institute of Theoretical and Experimental Physics AS USSR)

BEDA, A.G.; KONDRAT'YEV, L.N.; TRET'YAKOV, Ye.F.

Cross section of Cd^{108} activation by thermal neutrons.
Atom. energ. 16, no.2:145-146 F '64. (MIRA 17:3)

ACCESSION NR: AP4042589 S/0056/64/046/006/2241/2242

AUTHORS: Kondrat'yev, L. N.; Tret'yakov, Ye. F.

TITLE: New data on the excited levels of W-182

SOURCE: Zh. eksper. i teor. fiz., v. 46, no. 6, 1964, 2241-2242

TOPIC TAGS: tungsten, level transition, beta spectrometry, photoelectron, internal conversion, multipolarity

ABSTRACT: The conversion-electron and photoelectron spectra of W^{182} were investigated in the toroidal-field iron-free double β spectrometer of ITEF, described elsewhere (Izv. AN SSSR, ser. fiz., v. 26, 1470, 1962). The results are used to compile an excited level scheme for W^{182}. The multipolarities indicated on the level scheme were determined from the ratios of the internal conversion coefficient on different subshells in the case of low-energy transitions, and from the intensities in conversion-electron and photoelectron

Card 1/3

ACCESSION NR: AP4042589

spectra in the case of high-energy transitions. The 892.2-keV transition between the 1222-and 329.6-keV levels was observed experimentally for the first time. The spins and parities of several excited levels of W^{182} were determined from the multipolarities of the transitions. The results agree with all published data except the 1258-keV level, for which the authors obtain an assignment 3^-, with the literature data giving either 2^+ or 1^-. Orig. art. has: 1 figure.

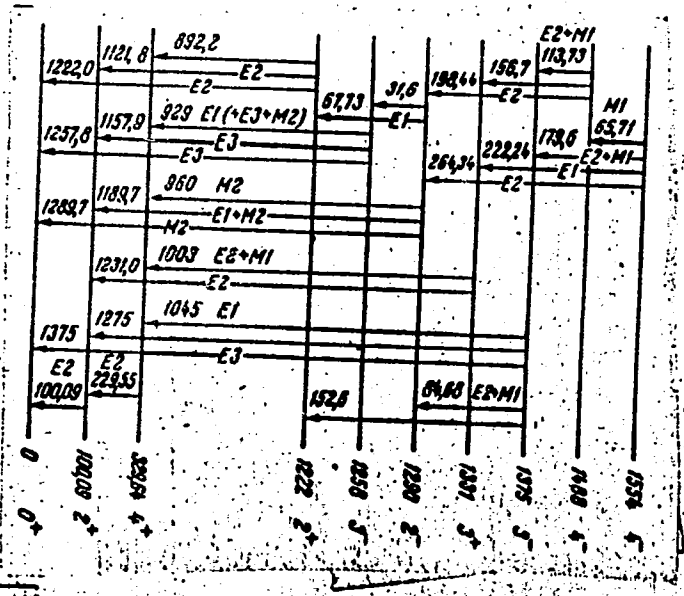
ASSOCIATION: None

SUBMITTED: 13Aug63 TE ACC: ENCL: 01

SUB CODE: NP,OP NR REF SOV: 004 OTHER: 004

Card 2/3

ACCESSION NR: AP4042589 ENCLOSURE: 01



Excited levels of W^{182}

Card 3/3

TSET'YAKOV Ye.F.; KONDRAT'YEV, A.A.

Spectrum of internal conversion electrons accompanying the α-decay of Pu^{239}, and the level scheme of U^{235}. Izv. AN SSSR Ser. fiz. 29 no.2:242-248 F '65.

(MIRA 18:3)

1. Institut teoreticheskoy i eksperimental'noy fiziki Gosudarstvennogo komiteta po ispol'zovaniyu atomnoy energii SSSR.

BEDA, A.G.; KONDRAT'YEV, L.N.; TRET'YAKOV, Ye.F.

Half-life of Cd^{109}. Izv. AN SSSR. Ser. fiz. 29 no.7:1092 Jl '65. (MIRA 18:7)

L 1571-66 EWT(m)/EWP(t)/EWP(b) DIAAP/IJP(c) JD/JG

ACCESSION NR: AP5019208 UR/0056/65/049/001/0007/0009

AUTHOR: Balats, M. Ya.; Karapetyan, V. V.; Kondrat'yev, L. N.; Obukhov, Yu. V.

TITLE: Intensity of nonradiative transitions in Ta and Pu^{239} mesic atoms

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 49, no. 1, 1965, 7-9

TOPIC TAGS: mesic atom, nonradiative transition, tantalum, plutonium, Mu meson, x ray spectrum

ABSTRACT: This is a continuation of intensity measurements of nonradiative transitions in a number of heavy elements (ZhETF v. 38, 1715, 1960 and v. 39, 1168, 1960), carried out by means of a scintillation γ-spectrometer. The authors investigated the mesic x-ray spectra and have determined the ratio of the intensities of the 2p--1s transitions in Ta and Pu^{239} relative to Pb. Some modification was made in the experimental set-up for the measurements with Pu in order to accomodate the large background in the γ-spectrometer counter from the natural radioactivity of Pu^{239}. Preliminary measurements have shown that when the γ-detector is loaded by the Pu activity the γ-ray spectrum from the 2p--1s transitions in Pb is displaced towards the hard region by 3--5%, but this shift causes no noticeable error in the experimental results. The fraction of the nonradiative 2p--1s transitions was determined by comparison of the γ-spectra obtained with lead and with the materials

Card 1/2

KONDRAT'YEV, L.N.; TRET'YAKOV, Ye.F.

Anomalous conversion of the 59.6 Kev. transition in Np^{237}.
Izv. AN SSSR. Ser.fiz. 30 no.1:132-134 Ja '66.
(MIRA 19:1)

L 29083-66

ACCESSION NR: AP5019208 UR/0056/65/049/001/0007/0009

AUTHOR: Balats, M. Ya.; Karapetyan, V. V.; Kondrat'yev, L. N.; Obukhov, Yu. V.

TITLE: Intensity of nonradiative transitions in Ta and Pu^{239} mesic atoms

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 49, no. 1, 1965, 7-9

TOPIC TAGS: mesic atom, nonradiative transition, tantalum, plutonium, Mu meson, x ray spectrum

ABSTRACT: This is a continuation of intensity measurements of nonradiative transitions in a number of heavy elements (ZhETF v. 38, 1715, 1960 and v. 39, 1168, 1960), carried out by means of a scintillation γ-spectrometer. The authors investigated the mesic x-ray spectra and have determined the ratio of the intensities of the 2p--1s transitions in Ta and Pu^{239} relative to Pb. Some modification was made in the experimental set-up for the measurements with Pu in order to accomodate the large background in the γ-spectrometer counter from the natural radioactivity of Pu^{239}. Preliminary measurements have shown that when the γ-detector is loaded by the Pu activity the γ-ray spectrum from the 2p--1s transitions in Pb is displaced towards the hard region by 3--5%, but this shift causes no noticeable error in the experimental results. The fraction of the nonradiative 2p--1s transitions was determined by comparison of the γ-spectra obtained with lead and with the materials

Card 1/2

KONDRAT'YEV, L.P.

The role of a foreman in industry. Leg.prom.15 no.10:52-53 O '55.
(MLRA 9:1)

1.Master zatyazh.uchastka obuvnoy fabriki no.2 "Proletarskaya pobeda".
(Shoe industry) (Foremen)

KONDRAT'YEV, L.S.

Calculating heat liberation from pipes in heating systems.
Vod.i san.tekh.no.3:11-12 Mr '56. (MLRA 9:7)
(Heating--Pipes)

KONDRAT'YEV, L.S.

Using steam radiators in heating systems. Vod. i san. tekh. no.8:34-35 Ag '56. (MLRA 9:10)

(Radiators)

KURANOV, I.N., KONDRAT'YEV, I.S.

Reasons for freezing of radiators. Vod. i san. tekh. no.9:33-35 S '58. (MIRA 11:10)

(Radiators--Cold weather conditions)

KONDRAT'YEV, L.S.

Calculations for polyserial heating installations. Vod. i san. tekh. no.6:20-24 Je '59. (MIRA 12:8)
(Hot-water heating)

KONDRAT'YEV, L. T.

"Laying Telephone Cables by means of a Deep Plow," Vestnik Svyazi, No. 6, (147), p 20, 1952.

Work Specialist, Stavropol' Construction-Installation Administration for Radiofication.

Translation- M- 790, 30 Sep, 1955.

EE -2/EWT(d)/EEC(k ... /EEC-4/EED-2/EWA(c) Pn-4/Po-4/Pq-4/Pg-4/Pae-4

AP5012888

AUTHOR: Kondrat'yev, L. V. (Moscow)

TITLE: Behavior of inertial systems of navigation during high-speed flights

AN SSSR. Izvestiya. Tekhnicheskaya kibernetika. no. 2, 1965, 170-181

AGS navigation system, inertial navigation system

ABSTRACT. The dynamic characteristics of inertial navigation systems during supersonic- and cosmic-speed flights are theoretically analyzed. As a result of ... the equations of the inertial system, hodographs are obtained of the ... characteristic equation for the errors involved in determining the coordinates of longitudinal and lateral motions of a ... the hodographs correspond to the variation of the circular velocity of the motion within the entire possible range. The investigation is extended over circular flight speeds that exceed the first cosmic speed. The time variation of error found by the author

Card 1/2

L 63259-65
ACCESSION NR: AP5012888

[illegible] that reported by W. Johnson and R. B. Macdonald (JAS Report, [illegible] 1959) and other researchers. In comparing the results, the behavior of the inertial system at the first cosmic speed is considered. Celestial-[illegible] relations true for elliptic trajectories with a small eccentricity are [illegible] criterion for comparison. Orig. art. has: 9 figures and 60 formulas.

[illegible] NATION: none

[illegible] ENCL: 00 SUB CODE: NG

[illegible]

Card 2/2

KONDRAT'YEV, M., gvardii mayor

Always forward. Voen.vest. 43 no.7:36-37 Jl '63. (MIRA 16:11)

KONDRAT'YEV, M. A.

Kondrat'yev, M. A. -- "Investigation of the Problems of Rational Placement of Tractor Plows in a Horizontal Plane." Min Higher Education USSR. Moscpw Inst of the Mechanization and Electrification of Agriculture imeni V. M. Molotov. Moscow, 1956. (Disseration For the Degree of Candidate in Technieal Sciences).

So: Knizhna/a Letopis', No. 11, 1956, pp 103-114

KONDRAT'YEV, M.A.

SVIRSHCHEVSKIY, Bronislav Stanislavovich; ABEZKOV, M.S., red.; ANTONOVSKIY, B.N., red.; BEDNYAKOVA, A.V., red.; GLAZKO, V.G., red.; GOROBETS, P.Z., red.; DOKUCHAYEVA, A.P., red.; YELENEV, A.V., red.; KISELEV, I.I., red.; KOGANOV, A.B., red.; [redacted], red.; KONYUSHKO, V.A., red.; KURGANOV, A.I., red.; PUTYATIN, M.D., red.; FERE, N.E., red.; LETNEV, B.Ya., red.; MAKHOVA, N.N., tekhn. red.; GOR'KOVA, Z.D., tekhn. red.

[Utilization of tractors and machinery] Ekspluatatsiia mashinno-traktornogo parka. Izd.3., perer. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1958. 660 p. (MIRA 11:10)

(Agricultural machinery)

KONDRAT'YEV, M., kand. tekhn. nauk; SERGEYEV, A., kand. tekhn. nauk.

Manuals must be of the best quality. MTS 18 no.8:57-58 Ag '58.
(MIRA 11:9)

(Agricultural machinery)

KONDRAT'YEV, M.A., kand.tekhn.nauk; ALEKPEROV, D., aspirant

Improving the performance of general purpose plows. Trudy MIMESKH 6:189-205 '59. (MIRA 14:5)
(Plows)

ACCESSION NR: AP4009625 S/0293/63/001/003/0436/0442

AUTHORS: Grigorov, N. L.; Zhuravlev, D. A.; Kondrat'yev, M. A.; Rapoport, I. D.; Savenko, I. A.

TITLE: Investigation of cosmic radiation beyond the limits of the atmosphere

SOURCE: Kosmicheskiye issledovaniya, v. 1, no. 3, 1963, 436-442

TOPIC TAGS: cosmic radiation, extra-atmospheric cosmic radiation, cosmic radiation measurement, cosmic radiation intensity, cosmic particle ionization

ABSTRACT: Tests conductedon the traces of charged particles in an emulsion, subjected to radiation at a height of 306-339 kilometers, showed that the intensity of the recorded radiation was three times that of primary cosmic radiation. Approximately 50% of the excess particles are nonnuclear-active particles with minimal ionization (in all likelihood, these are electrons). The remaining excess particles are highly ionizing and are the products of nuclear splitting. Fig. 1 of the Enclosure indicates the results of tests carried out with counters on the second cosmic ship, as well as the intensity of cosmic radiation measured by A. N. Charakhch'yan and T. N. Charakhch'yan (A. N. Charakhch'yan, T. N. Charakhch'yan. Zh. eksperim. i teoret. fiz., 35, 1088, 1958). It is pointed out that, although the existence of excess radiation in the form of charged particles

Card 1/3

ACCESSION NR: AP4009625

has been noted in a number of papers dealing with radiation studies at heights of 200-300 km, the nature of this radiation and the mechanism of its formation is not yet clear (that is, whether they are protons of the internal radiation belt or whether these excess particles are genetically related to primary cosmic radiation). On the second cosmic ship a photo-emulsion unit was installed, consisting of 489 layers of emulsion NIKFI"R", 10x10 cm^2, with a layer thickness of 400 microns. Since the emulsion recorded all particles integrally, not discriminating them in terms of time, for purposes of comparison of the emulsion data with the counter-tube data, it was necessary to average the latter for the entire flight time, considering the time the instrument was located at different latitudes and the dependence of radiation intensity on observation site latitude. Emulsion sensitivity was sufficient to provide reliable recording of particles with minimal ionization. The absolute intensity of the particles was determined to ensure that all the particles recorded by the counter-tubes were also recorded by the emulsion. It was found that more than 60% of the emulsion-recorded particles are particles with minimum ionization, while 40% of the particles showed an ionization of $g/g_{min} > 1.4$ (g = grain density). The author explained the technique used to determine what part of the high-ionization particles was formed by nuclear splitting. This method was based on the fact that at various heights in the atmosphere streams of high-ionizing particles under various filters and in the air are identical and proportional to the stream of the star-generating

Card 2/5

ACCESSION NR: AP4009625

component at a given height; that is, to the number of "stars" formed in 1cc of emulsion per unit time. In order to determine the number of stars, three observers were used to inspect an emulsion area of 0.072 cc, with a magnification of 450X. Stars were recorded with a number of grey and black traces $N_h \geq 3$. The authors found 2260 ± 170 stars/cc/day with $N_h \geq 3$; that is, from nuclear splitting one may anticipate 0.25 ± 0.04 particles/cm^2/sec. The author also concluded that protons of the inner radiation belt, incident in an ionization interval $2.4 < g/g_{min} < 7.8$, after passing through the walls of the satellite-ship, may constitute 3 ± 4% of all the particles recorded by the counter. By comparing the number of stars with what would normally be expected on the supposition that the excess particles are protons or other nuclear-active particles, generated by primary cosmic radiation in the substance surrounding the emulsion, the author concluded that the relativistic excess particles are high-energy electrons, and are not nuclear-active. The "grey" traces are the product of nuclear splitting (in their overwhelming mass - by protons), and are not protons of the inner belt. This is to be understood in the light of the fact that, in terms of their specific ionization, excess particles at heights of 200-300 km may be divided into two groups: relativistic ($g/g_{min} \leq 1.4$) and "grey" ($g/g_{min} > 1.4$), with the relativistic comprising 45%, and the "grey" 55% of all excess particles. Inner belt protons, if indeed they are present among the excess particles within the space ship, constitute not more than 4 ± 6% of all excess particles. Most of the excess parti-

Card 3/3

ACCESSION NR: AP4009625

cles (and possibly all of them) are genetically related to the primary cosmic radiation at the point of observation. The authors express their gratitude to V. V. Bobrovskaya and E. A. Orlova for conducting the tests. Orig. art. has: 5 figures.

ASSOCIATION: none

SUBMITTED: 15Jul63 DATE ACQ: 30Jan64 ENCL: 01

SUB CODE: AS NO REF SOV: 005 OTHER: 005

Card 4/5

SARAPIN, I.G., kand. tekhn. nauk; KONDRAT'YEV, M.I., inzh.

Fixing the duration of the vibration compaction of keramzit concrete mixes during the casting of products. Stroi. mat. 11 no.4:36-37 Ap '65. (MIRA 18:6)

KONDRAT'YEV, M.N.; MARKOV, Ye.N.

Containers for multiple use. Mashinostroitel' no.8:36-37 Ag '62. (MIRA 15:8)

(Containers)

GORCHAKOV, S.N.; GRAM, I.I., starshiy inzhener; KONDRAT'YEV, M.S., inzhener-mekhanik; IVANOVSKIY, N.F.; KOVALEV, M.A., starshiy energetik tresta.

Improving the use and repair of building machinery. Strei.prom.34 no.6: 39-40 Je '56. (MIRA 9:9)

1.Glavnyy mekhanik tresta Zaporozhstroy (for Gorchakov).2.Otdel glavnogo mekhanika tresta Vostokneftestroy (for Kondrat'yev).3.Glavnyy mekhanik tresta Stal'montazh-5 Minstroya SSSR (for Ivanovskiy).
(Building machinery)

KONDRAT'YEV, M.T.

Fiftieth anniversary of the "Farmakon" Plant. Med.prom.12 no.3:37-42 Mr '58. (MIRA 11:4)
(LENINGRAD--DRUG INDUSTRY)

KONDRAT'YEV, M. YA.

112-2-3694

Translation from: Referativnyy Zhurnal, Elektrotekhnika, 1957, Nr 2, p. 171 (USSR)

AUTHOR: Kondrat'yev, M. Ya.

TITLE: A Simplified Alternating-current Resistance Meter (Uproshchennyy rezistivimetr na peremennom toke)

PERIODICAL: Nauch. raboty stud. Sverdl. gorn. in-t, 1956, sb. 2, pp. 49-53

ABSTRACT: Determining the resistivity (R) of a liquid is a matter of measuring the contact resistance (C) to alternating current of two metal electrodes immersed in it. The resistance to be measured is connected in series with the reference resistance and connected to the secondary winding of the vibropack fed by two "CATYPH" type cells. The voltage drops (on the resistance being measured and on the reference resistance) are measured successively with a voltmeter connected across the rectifier bridge. The resistivity of the liquid is then found from the curves:

Card 1/2 $\rho = \phi\left(\frac{n_x}{n_э}\right)$. Here ρ is the resistivity of

A Simplified Alternating-current Resistance Meter (Cont.)

the liquid; n_x and $n_э$ are the galvanometer readings. Formulas are derived for calculating the curves, and the basic circuit of the instrument is shown. The instrument is equipped with three reference resistances of 5,000, 2,000 and 1,000 ohms. The measurement error does not exceed five per cent. The instrument weighs two kilograms.

N.I.V.

Card 2/2

KONDRAT'YEV, N.

Kislovodsk today. Okhr.truda i sots.strakh. 3 no.6:12-15 Je '60. (MIRA 13:7)

1. Sekretar' Kislovodskogo gorkoma kommunisticheskoy partii Sovetskogo Soyuza.
(Kislovodsk—Health resports, watering places, etc.)

KONDRAT'YEV, N., inzh.

Small tanks made with sliding formwork. Stroitel' no.11:7, 10 N '61. (MIRA 15:1)
(Tanks) (Concrete construction)

SOV/44 - 58 - 4 - 3271

Translation from: Referativnyy zhurnal, Matematika, 1958, Nr 4, p 139 (USSR)

AUTHOR: Kondrat'yev, N. A.

TITLE: On the Application in Practice of the Chaplygin Method of the Approximate Integration of an Equation of the First Order (K praktike chaplyginskogo sposoba priblizhennogo integrirovaniya uravneniya pervogo poryadka)

PERIODICAL: Tr. Astrakhansk. tekhn. in-ta rybn. prom-sti i kh-va, 1957, Nr 4, pp 33-43

ABSTRACT: For the determination of the first (initial) approximations in the well-known Chaplygin method, the author proposes the use of initial values. If in the equation $y'=f(x, y)$, f''_{yy} will preserve the sign in a certain interval, then the given initial value y_0 will be the upper (or lower) bound; there will be another bound $u=y_0 \mp \beta(x)$, where $\beta(x)$ is the solution of the equation $\beta'(x) - f'_y(x, y_0) \pm f(x, y_0) = 0$ with given initial values equal to zero. Depending on the sign of f''_{yy} in the equations "+" or

Card 1/2

" — " is chosen. If the second derivative does not preserve the same sign then only one-sided approximations are obtained.

Ya. I. Alikhashkin

Card 2/2

ZINEVICH, V.D., inzh.; KONDRAT'YEV, N.A., inzh.; POPOV, Yu.N., inzh.

Dynamics of a rock loading machine with vibrator bucket.
Nauch.dokl.vys.shkoly; gor.delo. no.4:207-211 '58.
(MIRA 12:1)
1. Predstavleno kafedroy prikladnoy mekhaniki Leningradskogo gornogo instituta imeni G.V. Plekhanova.
(Mining machinery) (Material handling)

137-58-4-6870

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 4, p 79 (USSR)

AUTHORS: Kondrat'yev, N.P., Fridlyander, I.N.

TITLE: An Investigation of the Decomposition of a Solid Solution of Al-Cu-Mg-Mn Alloys Crystallizing at Various Rate of Cooling (Issledovaniye raspada tverdogo rastvora splavov sistemy Al-Cu-Mg-Mn, kristallizovavshikhsya s raznymi skorostyami okhlazhdeniya)

PERIODICAL: V sb. Metallurg. osnovy lit'ya splavov. Moscow, Oborongiz, 1957, pp 380-393

ABSTRACT: The effect of changes in the rates of crystallization of Al-Cu-Mg-Mn alloys having various amounts of Cu, Mg, and Mn upon the properties of alloys at room and elevated temperatures is investigated. An increase in the rate of crystallization of the alloys results in an increase in strength both at room and at elevated (150°C) temperature. The increase in the strength of alloys crystallizing at high speeds is due primarily to the difference in the properties of the solid solution and the nature of its breakdown. The difference in microhardness attains a maximum at 0.6% Mn content and declines when an alloy contains 0.2 and

137-58-4-6870

An Investigation of the Decomposition (cont.)

1.2% Mn. Variation in Mn content has its maximum effect in increasing the difference in strength values relative to rate of crystallization in alloys of the D16 type (with Mg), in which it attains 5-6 kg/mm^2, and to a lesser degree in alloys of the VD17 type (with Mg), and has practically no effect on alloys of the D20 type (without Mg). To assure maximum high-temperature corrosion resistance in the alloys it is necessary that ingots be crystallized at maximum speed. This is particularly important for alloys of the type of D16.

1. Alloys--Crystallization 2. Alloys--Cooling methods 3. Aluminum --Applications 4. Copper--Applications 5. Magnesium--Applications 6. Manganese--Applications

N.P.

Card 2/2

KONDRAT'YEV, Nikolay Dmitriyevich; SOLOV'YEV, N.I., redaktor; SHIBNIS, M.V., tekhnicheskiy redaktor.

[Karl Zedin] Karl Zedin. Moskva, Voen. izd-vo Ministerstva obor. SSSR, 1956. 82 p. (MLRA 9:5)
(Zedin, Karl Yanovich, 1885-1919)

KONDRAT'YEV, Nikolay Dmitriyevich; SOLOV'YEV, N.I., red.

Marshall Bliukher. Moskva, Voenizdat, 1965. 292 p.
(MIRA 18:10)

KONDRAT'YEV, Nikolay Fedorovich; MIKHAYLIK, Aleksey Fedoseyevich; DONSKOY, Ya.Ye., red.; LIMANOVA, M.I., tekhn. red.

[Kharkov in the seven-year plan] Khar'kov v semiletke. Khar'kov, Khar'kovskoe knizhnoe izd-vo, 1961. 112 p. (MIRA 15:1)
(Kharkov—Economic policy)

ACC NR: AP6035935 SOURCE CODE: UR/0413/66/000/020/0197/0197

INVENTOR: Kondrat'yev, N. G.

ORG: none

TITLE: Inertial-generator dual-signal transducer. Class 62, No. 187534

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 20, 1966, 197

TOPIC TAGS: transducer, acceleration transducer, ~~aircraft component~~, aircraft landing gear, ~~component~~ inertial generator transducer, electromagnetic device

ABSTRACT: An Author Certificate has been issued for an inertial-generator dual-signal transducer for controlling an electromagnetic cock used in the braking of aircraft wheels. In a housing are located a flywheel, a flywheel drive shaft, a push rod, a yoke, a spring, and a microswitch. To control the relay in the automatic braking system, as well as other aircraft control equipment, electromagnetic coils are mounted on a bracket in the housing and a permanent ring magnetic is mounted on the flywheel; as it rotates, the current induced in the electromagnet coil's windings opens the relay's contact. Orig. art. has: 1 figure.

SUB CODE: 01, 09/ SUBM DATE: 15Sep64/

Card 1/1 UDC: 629.135/.138

MALISHEVSKIY, N.G., redaktor; KOLOBKOV, P.S.; KONDRAT'YEV, N.I.; MALOVA, N.M.

[Design and operation of water supply and sewer pumping stations] Proektirovanie i ekspluatatsiia vodoprovodnykh i kanalizatsionnykh nasosnykh stantsii. Pod red. N.G.Malishevskogo. Moskva, Gos. izd. lit. po stroitel'stvu i arkhitekture, 1953. 411 p. (MLRA 7:11D)

KONDRAT'YEV, N.I.

Materials on the medico-geographical features of Austria. Geog. sbor. no.14:108-117 '61. (MIRA 15:1)
(AUSTRIA—MEDICAL GEOGRAPHY) (AUSTRIA—PUBLIC HEALTH)

ACCESSION NR: AT4015876 S/3055/63/000/002/0119/0121

AUTHORS: Kapitsa, S. P.; Kondrat'yev, N. I.

TITLE: Broadband panoramic wavemeter

SOURCE: AN SSSR. Fizicheskaya laboratoriya. Elektronika bol'shikh moshchnostey (High-power electronics), no. 2, 1963, 119-121

TOPIC TAGS: wavemeter, parnoramic wavemeter, panoramic broadband wavemeter, wavelength bandwidth, oscilloscope wave display

ABSTRACT: The wavemeter described differs from those hitherto known in that it can be used to observe the spectrum of continuous oscillations at high frequency over a wide range of wavelengths. It is based on a tunable quarter-wave coaxial cavity, the axial conductor of which is moved longitudinally by a motor, so that the effective length of the cavity varies periodically about some average value. The oscilloscope beam is scanned in phase with the tuning

Card 1/2

ACCESSION NR: AT4015876

of the wavemeter and the vertical beam deflection is determined by the detector signal. Consequently, a continuous monochromatic signal is represented in the form of a resonance curve of the coaxial resonator, the position of which on the screen depends on the signal frequency. A wavelength bandwidth up to 12 cm can be accommodated, and the range of measurements is between 5 and 50 cm. The accuracy with which the absolute wavelength is determined is 2--3%, but the relative wavelength can be determined accurate to 0.2%. The use of an induction motor eliminates parasitic pickup at power line frequency and its harmonics. "In conclusion, the authors are grateful to P. L. Kapitsa for interest and support of this work." Orig. art. has: 2 figures.

ASSOCIATION: Fizicheskaya laboratoriya AN SSSR (Physics Laboratory, AN SSSR)

SUBMITTED: 00 DATE ACQ: 25Jan64 ENCL: 00

SUB CODE: GE, SD NR REF SOV: 000 OTHER: 000

Card 2/2

ACCESSION NR: AT4015877 S/3055/63/000/002/0122/0132

AUTHORS: Kapitsa, S. P.; Kondrat'yev, N. I.; Petrusevich, Yu. M.

TITLE: Microwave measurements with recording on graph paper

SOURCE: AN SSSR. Fizicheskaya laboratoriya. Elektronika bol'shikh moshchnostey (High-power electronics), no. 2, 1963, 122-132

TOPIC TAGS: microwave measurement, microwave measurement plotting, plotting table, resonance curve plotting, broadband wavemeter, field plotting, current voltage characteristic plotting

ABSTRACT: A method is described by which microwave measurements can be plotted on a graph paper automatically for further processing. The microwave measurement procedure used in the laboratory is also described. The key piece of equipment is an automatic plotting table employing some of the drives from an automatic recording potentiometer. The plotting table records the connection between two

Card 1/2

ACCESSION NR: AT4015877

quantities, one of which is varied by rotating a synchronous motor and the other one is varied by the measuring circuit. The uses of the equipment for the plotting of resonance curves, as a broadband wavemeter, for calibration against a heterodyne wavemeter, and for plotting of resonance curves with the aid of a klystron are described. In addition to recording resonance curves, the plotting table can be used to study the distribution of high-frequency fields, to study the current-voltage characteristics, and for many other applications. "The authors are grateful to P. L. Kapitsa for interest in the work and for support." Orig. art. has: 9 figures and 10 formulas.

ASSOCIATION: Fizicheskaya laboratoriya AN SSSR (Physics Laboratory, AN SSSR)

SUBMITTED: 00 DATE ACQ: 25Jan64 ENCL: 02

SUB CODE: EE, SD NR REF SOV: 003 OTHER: 000

Card 2/4

Kondrat'yev, N.

AUTHORS: Peshkov, V.P. and Kondrat'yev, N.I. 120-4-34/35

TITLE: A Sylphon McLeod Manometer (Sil'fonnyy manometr Mak-Leoda)

PERIODICAL: Pribory i Tekhnika Eksperimenta, 1957, No.4, p. 105 (USSR)

ABSTRACT: The McLeod manometer is the simplest and most convenient absolute manometer. The usual manometer includes a movable reservoir or fore-vacuum. This has the undesirable effect of contaminating the capillaries. The movable reservoir is usually connected in by means of a rubber tube. The action of the mercury on the rubber walls results in the formation of a sulphide film which sticks to glass inside the manometer and causes errors of measurement. Manometers with an additional fore-vacuum are contaminated as a result of constant contact of the mercury with the atmosphere.
A new form of the above manometer is described wherein the movable reservoir is replaced by sylphon bellows. All metal parts which are in contact with the mercury are made of steel. Tests on this instrument have shown it to be satisfactory in practice. The bellows can be mounted either vertically or horizontally. There is 1 figure.

ASSOCIATION: The Vavilov Institute for Physical Problems Ac.Sc.USSR

Card 1/2

MALISHEVSKIY, Nikolay Georgiyevich; KONDRAT'YEV, Nikolay Ivanovich; ALESHKO, Pavel Ivanovich; MALOVA, Nadezhda Mikhaylovna; TRET'YAKOVA, A.N., red.; TROFIMENKO, A.S., tekhn.red.

[Water-supply and sewerage pumps and pumping stations] Vodoprovodnye i kanalizatsionnye nasosy i nasosnye stantsiil. Pod red. N.G.Malishevskogo. Khar'kov, Izd-vo Khar'kovskogo gos. univ. im. A.M.Gor'kogo, 1960. 394 p. (MIRA 14:5)
(Pumping stations)

DENISOV, Ivan Ivanovich, inzh.-podpolkovnik; KONDRAT'YEV, N.L., red.; SLEPTSOVA, Ye.N., tekhn. red.

[Preparing artillery pieces for firing]Podgotovka artilleriiskogo orudiia k strel'be. Moskva, Voenizdat, 1962. 50 p. (MIRA 15:10)

(Artillery)

VORONOV, L.V., podpolkovnik; KONDRAT'YEV, N.L., red.

[Determination of astronomical azimuths] Opredelenie astronomicheskikh azimutov. Moskva, Voenizdat, 1964. 111 p. (MIRA 17:9)

DOKUCHAYEV, M.S., polkovnik zapasa; KONDRAT'YEV, N.L., red.;
MEDNIKOVA, A.N., tekhn. red.

[Selection and equipping of observation posts and firing positions in the artillery] Vybor i oborudovanie nabliudatel'nykh punktov i ognevykh pozitsii v artillerii. Moskva, Voenizdat, 1963. 60 p. (MIRA 16:7)

(Artillery)

VISHNYAKOV, N.A., polkovnik; KONDRAT'YEV, N.L., red.; CHAPAYEVA, R.I., tekhn. red.

[Training artillery reconnaissance troops]Obuchenie artilleriiskikh razvedchikov. Moskva, Voenizdat, 1962. 94 p. (MIRA 16:1)

(Artillery--Problems, exercises, etc.)

SOKOLOV, Igor' Aleksandrovich, polkovnik; KHORENKOV, A.V., polkovnik, dots., kand. voyennykh nauk; KONDRAT'YEV, N.L., red.; KUZ'MIN, I.F., tekhn. red.

[Work with a map and an aerial photograph on the ground] Rabota s kartoi i aerosnimkom na mestnosti. Moskva, Voenizdat, 1963. 77 p. (MIRA 17:3)

KONDRAT'YEV, N.N.

Method and some results of surveying clouds with a phototheodolite from the endpoints of a base line. Trudy TSAO no.30:84-95 '59. (MIRA 12:9)
(Clouds--Photographic measurements)

ALEKSANDROVA, G.G.; ZHUKOVA, V.A.; KONDRAT'YEV, N.N.; KUSKOV, V.K.; MALETS, A.M.; SOLOMONOVA, N.L.; FEDOROVICH, R.M.; VOL'FKOVICH, S.I., akademik, red.; KOROBTSOVA, N.A., red.; YERMAKOV, M.S., tekhn. red.

[Work in technology] Tekhnologicheskie raboty. Moskva, Izd-vo Mosk. univ. 1963. 115 p. (Laboratornyi praktikum po khimicheskoi tekhnologii, no.4) (MIRA 17:1)

KONDRAT'YEV, N.N.

112-2-3611

Translation from: Referativnyy Zhurnal, Elektrotekhnika, 1957, Nr 2, p.193 (USSR)

AUTHOR: Shur, B.I., Kondrat'yev, N.N.

TITLE: An Electrical Device for Counting Finished Parts from Automatic Metal Bar Working Lathes (Elektricheskoye ustroystvo dlya podshcheta obrabotannykh detaley na tokarnykh prutkovykh avtomatakh)

PERIODICAL: Vestn. tekhn. inform. M-vo stankostroit. i instrumen. prom-sti SSSR, 1956, Nr 2, pp.35-36

ABSTRACT: In order to avoid false readings, the electrical counter circuit of this device can be closed only at the moment when the bar material being worked is pushed against the tool rest which serves as a second electrical contact.

G.I.F.

Card 1/1

L 17890-63
ACCESSION NR: AP3005763

the separation of selenium from nitrosylsulfuricacid, it is sufficient to add only 0.2-0.3% of sulfur based on the total weight of acid; (vi) the reduction process of selenium compounds and the separation of selenium with natural or "gaseous" sulfur takes place quicker than with pure sulfur. Orig. art. has: 4tables and 1 formula.

ASSOCIATION: Moskovskiy gosudarstvenny*y universitet i Shchelkovskiy khimicheskiy zavod (Moscow State University and Shchelkovo Chemical Works)

SUBMITTED: 03Sep63 DATE ACQ: 07Aug63 ENCL: 00

SUB CODE: CH, EL NO REF SOV: 005 OTHER: 000

Card 2/2

KONDRAT'YEV, N.P.; SHTER, B.O.; CHERNYSHOVA, T.Ye.; LANGE, V.I., redaktor; POLOSINA, A.S., tekhnicheskiy redaktor.

[Operation and maintenance of a fleet of automobiles and tractors in the petroleum industry; a collection of articles] Ekspluatatsiia i remont avtotraktornogo parka neftianoi promyshlennosti; sbornik materialov. [Sost. N.P.Kondrat'ev, B.O. Shter, T.E. Chernyshova] Izd.2-oe, ispr. i dop. Moskva, Gos. nauchno-tekhn.izd-vo neftianoi i gorno-toplivnoi lit-ry, 1952. 502 p. (MLRA 8:10)

1. Russia (1923- U.S.S.R.) Ministerstvo neftyanoy promyshlennosti.
(Automobiles) (Tractors) (Petroleum industry)

KONDRAT'YEV, N.P.

Results of using remedial gymnastics for pupils of secondary schools. Vop. kur., fizioter. i lech. fiz. kult'. 30 no.3: 251-255 My-Je '65. (MIRA 18:12)

1. Vrachebno-fizkul'turnoye otdeleniye (zav.- N.P. Kondrat'yev) Ob"yedinennoy poliklinikl Ministerstva putey soobshcheniya (nachal'nik - zasluzhennyy vrach RSFSR A.G. Sarkisov), Moskva. Submitted February 22, 1962.

KONDRAT'YEV, M.P.; SHTER, B.O.; CHERNYSHOVA, T.Ye.; LOZBYAKOVA, Ye.S., vedushchiy redaktor; KHLEBNIKOVA, L.A., tekhnicheskiy redaktor

[Operation and repair of an automobile and tractor fleet of the petroleum industry; a collection of papers] Ekspluatatsiia i remont avtotraktornogo parka neftianoi promyshlennosti; sbornik materialov. Izd. 3-e, ispr. i dop. Moskva, Gos.nauchno-tekhn. izd-vo neft. i gorno-toplivnoi lit-ry, 1957. 563 p. (MLRA 10:7)

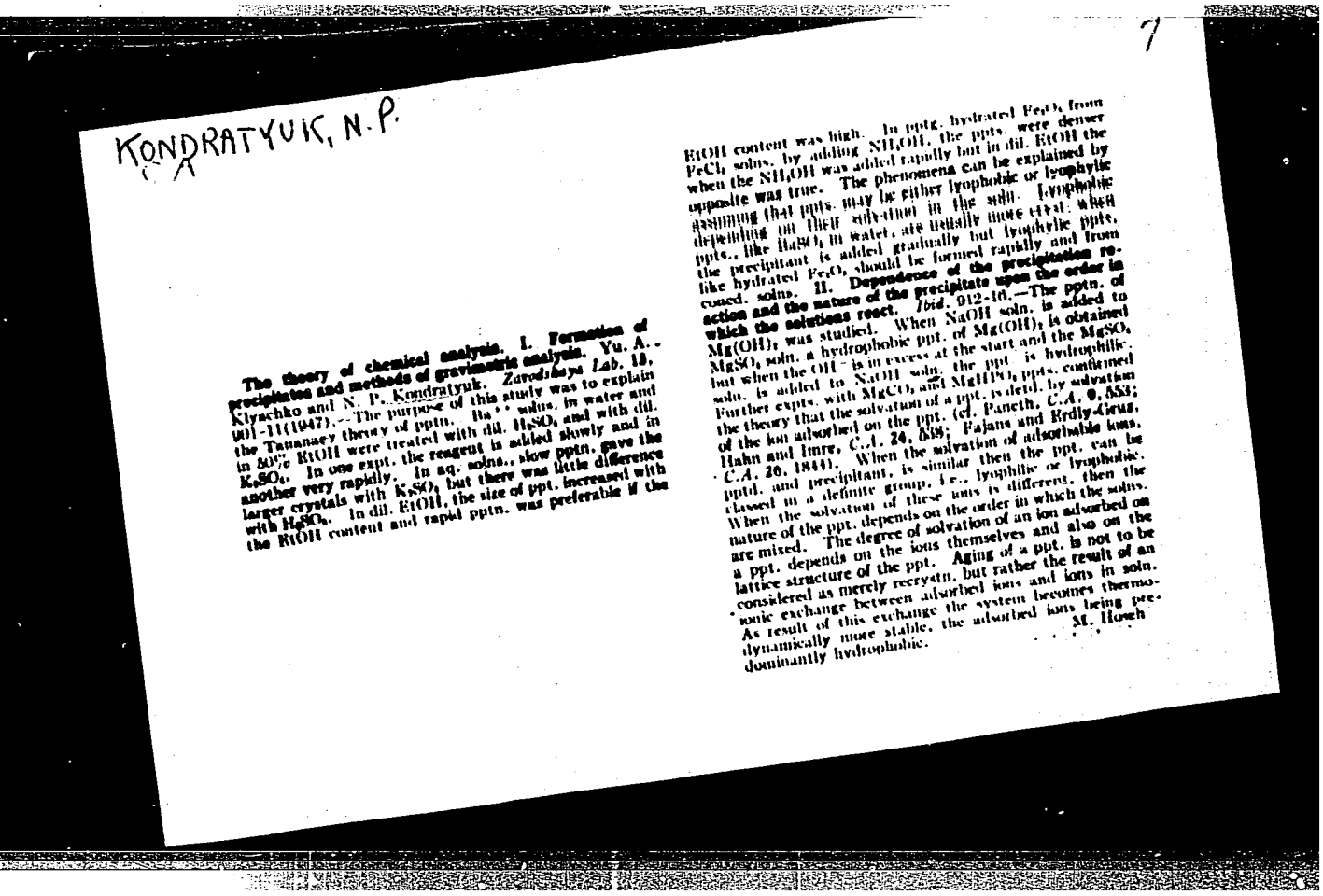
1. Russia (1923- U.S.S.R.) Ministerstvo neftyanoy promyshlennosti.

(Automobiles--Maintenance and repair)
(Tractors--Maintenance and repair)

SHTER, B.O.; KONDRAT'YEV, N.P.; LESNIKOVA, Ye.S.; MAKAROV, I.V.; CHERNYSHOVA, T.Ye.; SOLGANIK, G.Ya., ved. red.; FEDOTOVA, I.G., tekhn. red.

[Operation and repair of transportation and hoisting machinery of the petroleum and gas industry] Ekspluatatsiia i remont transportnykh sredstv i pod"emnykh mashin neftianoi i gazovoi promyshlennosti; spravochnik. Moskva, Gostoptekhizdat, 1962. 396 p. (MIRA 15:7)

(Gas, Natural--Transportation) (Petroleum--Transportation)

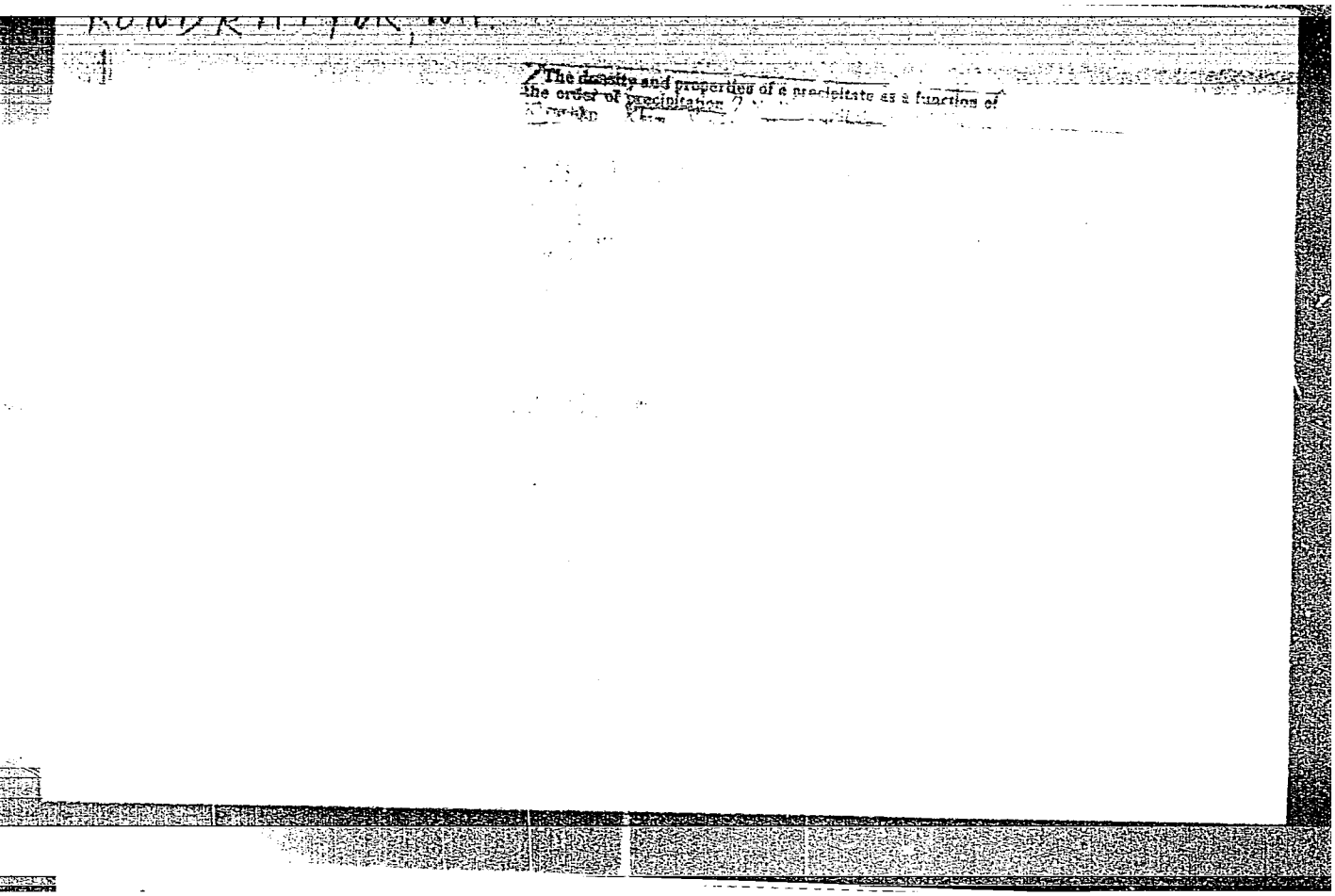


KONDRATYUK, N. P.

7

The theory of chemical analysis. I. Formation of precipitates and methods of gravimetric analysis. Yu. A. Klyachko and N. P. Kondratyuk. *Zavodskaya Lab.* 13, 901-11(1947).—The purpose of this study was to explain the Tananaev theory of pptn. Ba^{++} solns. in water and in 80% EtOH were treated with dil. H_2SO_4 and with dil. K_2SO_4. In one expt. the reagent is added slowly and in another very rapidly. In aq. solns., slow pptn. gave the larger crystals with K_2SO_4, but there was little difference with H_2SO_4. In dil. EtOH, the size of ppt. increased with the EtOH content and rapid pptn. was preferable if the EtOH content was high. In pptg. hydrated FeO_2 from $FeCl_3$ solns. by adding NH_4OH, the ppts. were denser when the NH_4OH was added rapidly but in dil. EtOH the opposite was true. The phenomena can be explained by assuming that ppts. may be either lyophobic or lyophylic depending on their solvation in the soln. Lyophobic ppts., like $BaSO_4$ in water, are initially more crystal. when the precipitant is added gradually but lyophylic ppts. like hydrated FeO_2 should be formed rapidly and from concd. solns. **II. Dependence of the precipitation reaction and the nature of the precipitate upon the order in which the solutions react.** *Ibid.* 912-16.—The pptn. of $Mg(OH)_2$ was studied. When NaOH soln. is added to $MgSO_4$ soln. a hydrophobic ppt. of $Mg(OH)_2$ is obtained but when the OH^- is in excess at the start and the $MgSO_4$ soln. is added to NaOH soln. the ppt. is hydrophilic. Further expts. with $MgCl_2$ and $Mg(IO_3)_2$ ppts. confirmed the theory that the solvation of a ppt. is detd. by solvation of the ion adsorbed on the ppt. (cf. Paneth, *C.A.* 9, 553; Hahn and Imre, *C.A.* 26, 1841). When the solvation of adsorbable ions, ppted. and precipitant, is similar then the ppt. can be classed in a definite group, i.e., lyophilic or lyophobic. When the solvation of these ions is different, then the nature of the ppt. depends on the order in which the solns. are mixed. The degree of solvation of an ion adsorbed on a ppt. depends on the ions themselves and also on the lattice structure of the ppt. Aging of a ppt. is not to be considered as merely recrystn. but rather the result of an ionic exchange between adsorbed ions and ions in soln. As result of this exchange the system becomes thermodynamically more stable, the adsorbed ions being predominantly hydrophobic. M. Hosch

KONDRATYUK, N. P. Dissertation for ~~Doc~~ Cand Chem Sci -- (diss) "Study ~~Analysis~~ of the process of precipitation and the structure of pseudo-amorphous sediments by using magnesium hydroxide as an example." Mos, 1957. 16 pp 22 cm . (Academy of Sciences USSR. Inst of Geochemistry and Analytic Chemistry im V.I. Vernadskiy)
(KL, 21-57, 99)



L 01865-67 EWT(l)/EWP(e)/EWI(m)/EWP(t)/ETI/EWP(k) IJP(c) JD/WW/GD

ACC NR: AT6029309 SOURCE CODE: UR/0000/66/000/000/0050/0056

AUTHOR: Kondrat'yev, N. S.

ORG: none

TITLE: Heat transfer in the initial section of a tube with movement of mercury in the tube

SOURCE: Moscow. Energeticheskiy institut. Teploobmen v elementakh energeticheskikh ustanovok (Heat exchange in power installation units). Moscow, Izd-vo Nauka, 1966, 50-56

TOPIC TAGS: convective heat transfer, nuclear reactor technology

ABSTRACT: The experimental apparatus is shown in Figure 1. Mercury was fed by gear pump 18 to overflow tank 6, whence it flowed by gravity through experimental tube 4, overflow device 7, volumetric flowmeter 15, cooler 16, and settling tank 17, back to the pump. The experimental tube 4, made of seamless polished stainless steel with an inside diameter of 5.26 mm and a wall thickness of 0.12 mm, was divided into two sections. The first section, 370 mm long (70 diameters), was unheated and served for hydrodynamic stabilization of the flow of mercury. In the second section, with a length of 251 mm (ℓ/d), the mercury was heated by condensing steam. The temperatures were measured with thermocouples. The experimental data obtained are

Card 1/3

L 01865-67

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000824210019-4"

ACC NR: AT6029309

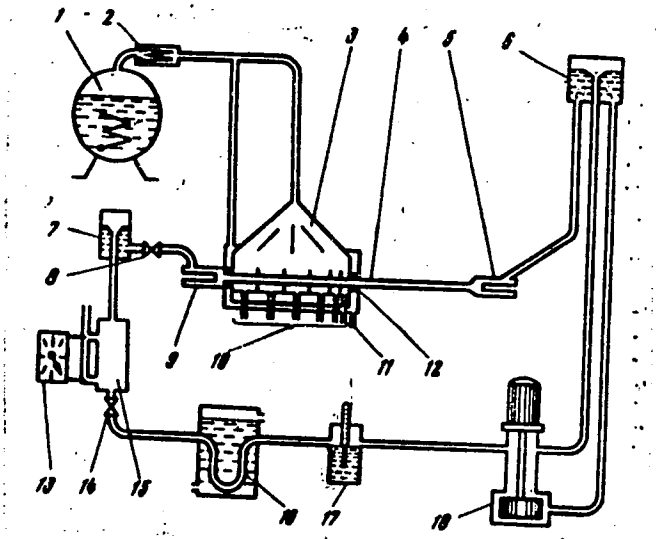


Fig. 1. Diagram of the apparatus

shown in an extensive table. Analysis of the results permits the following conclusions: 1) thermal stabilization sets in considerably earlier than with ordinary heat transfer

Card 2/3

KONDRAT'YEV, N.V., inzhener.

New 5-ton portable crane mounted on the ZIS-150 truck chassis.
Mekh.stroi. 11 no.11:9-12 N '54. (MLRA 7:12)
(Cranes, derricks, etc.)

KONDRAT'YEV, N.V.

Letter to the editor. Vest.mash.35 no.9:11-12 S '55. (MLRA 9:1)
(Cranes, derricks, etc.)

KONDRAT'YEV, N.V., inzh.; FEL'DBLYUM, B.I., inzh.

Effective measures for preventing crane accidents. Bezop.truda v prom. 1 no.10:27-28 O '57. (MIRA 10:11)

1. Balashinskiy zavod No. 24 (for Kondrat'yev). 2. Upravleniye TSentral'nogo okruga Gosgortekhnadzora SSSR.
(Cranes, derricks, etc.) (Machinery--Safety appliances)

KONDRAT'YEV, N.V.

"Free radicals as an active form of matter" by N.V. Kondrat'ev.
Priroda 50 no. 2:87 F '61. (MIRA 14:2)
(Radicals (Chemistry))

KONDRAT'YEV, N. Ya.

PHASE I TREASURE ISLAND BIBLIOGRAPHICAL REPORT AID 372 - I

Call No.: AF537692

BOOK
Author: KONDRAT'YEV, N. YA.
Full Title: ASTRONOMY IN AVIATION
Transliterated Title: Astronomiya v aviatsii
Publishing Data
Originating Agency: None
Publishing House: Military Publishing House of the War Ministry of USSR
Date: 1952 No. pp.: 128 No. of copies: Not given
Editorial Staff
Editor: None Tech. Ed.: None
Editor-in-Chief: None Appraiser: None
Text Data
Coverage: The book covers the subject of aviation astronomy in popular form. Its object is to show the basic technique of determining astronomically the time, the position, and the course of an airplane in flight. Principal aeronautical instruments are described. 62 graphs and photopictures with 10 tables and several examples and forms in the text and in the appendices are given.

The book has a narrative and descriptive character, and

does not go deeply into the subject. Nothing not already known seems to be brought out, but of some interest are the graphs, inserted in appendices 7, 8, 9 and 10, mentioned in the Table of Contents.

TABLE OF CONTENTS

Astronomiya v aviatsii

AID 372 - I

9-10. Graphs for the first and second halves of the year for determination of the moments of day-break and nightfall (inserts)

PAGES

Literature

Purpose: To popularize aeronatuical astronomy and for the use of students of summer courses of aviation in the army

127

Facilities: Several names of astronomers and aviators who have made contributions to aviation are cited.

No. of Russian and Slavic References: Nine after 1939

Available: A.I.D., Library of Congress.

4/4

KOLDRAT'YEV, N.Ya., voyennyy shtur[illegible] klassa, polkovnik.

Time and how ot determine it. Vest.Vozd.Fl. 40 no.6:64-69 Je '57.
(MLRA 10:8)

(Time--Systems and standards)

1(1); 20(1, 5) PHASE I BOOK EXPLOITATION SOV/3454

Kondrat'yev, Nikolay Yakovlevich

Astronomiya v aviatsii (Astronomy in Aviation) 2d ed., rev. and enl. Moscow, Voyen. izd-vo Min. oborony SSSR, 1959. 221 p. No. of copies printed not given.

Ed.: I. M. Medvedev, Guard Lt.-Col.; Tech. Ed.: Ye. K. Kochovalova

PURPOSE: This book is intended for students at aviation schools and institutes; members of aviation clubs; members of the Armed Forces, Civil Aviation, and DOSAAF (All-Union Voluntary Society for the Promotion of the Army, Aviation, and Navy); and the general reader.

COVERAGE: The book outlines the basic principles of astronomical navigation and covers briefly the subjects of descriptive and spherical astronomy. Foundations of astro-navigation, including the directions of points on the celestial sphere, certain aspects of time and its measurement, and navigational instruments are the main topics discussed. Problems of automatic navigation and space flights are also treated with particular emphasis on the development

Card 1/5

of radio navigational aids. There are 6 inserts, 119 figures, and numerous tables included in the text. No personalities are mentioned. No references are given.

TABLE OF CONTENTS:

Card 2/5

10. Chart for Determining the Time of Sunrise and Sunset (the Second Half of the Year) insert
11. Chart for Determining the Time of Evening and Morning Twilights (the First Half of the Year) insert
12. Chart for Determining the Time of Evening and Morning Twilights (the Second Half of the Year) insert

AVAILABLE: Library of Congress (TL586.K575)

AC/lsb
4-8-60